

to distinguish between the sister plants (1 and 5), it was unable to distinguish between fruits from the same individual (2 and 6). These latter results would indicate that the methodology was sound, but because of the exception noted above, it would appear that serology of itself cannot be accepted as an adequate criterion of relationship. Within known groups, such as the dent corn samples utilized, it appears to be valid — at least from this limited series of experiments. As with most taxonomic tools, it would seem that serological data should be correlated with evidence from other fields to be significant.

SUMMARY

Six samples of corn of *known* genealogy were tested by serological methods to determine whether or not the serological relationships were an accurate reflection of the genealogical relationships. The serological procedures are given. Results indicate that within the dent corns the serology did deflect the genealogical relationships, but the inability of serological techniques to distinguish between a dent corn and a popcorn demonstrates that serology of itself cannot be used as a valid clue to genealogical relationships in every case.

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JOSEPH BURKE IN 1853

R. KENT BEATTIE

In her recently published work on the history of botanical exploration west of the Mississippi (McKelvey, Susan Delano. *Botanical Exploration of the Trans-Mississippi West 1790-1850*. Arnold Arboretum, pages 792-817. 1955), Mrs. McKelvey gives a very excellent and adequate account of the botanical explorations of Joseph Burke in western Canada and the western United States in the years 1843 to 1847. For years, little has been known by botanists about Burke's work except that he collected some plants around "Fort Hall" in what is now known as southern Idaho. We had learned that there was material about Burke at Kew, but no one

had secured copies of it for study. Mrs. McKelvey obtained photostats and microfilms which are now at the Gray Herbarium. She traces his explorations in America from 1 March 1844 to 6 November 1847. During this period he was east of the Rocky Mountains in Canada till the autumn of 1844, then crossed the Rocky Mountains and went down the Columbia to Old Fort Walla Walla and east to Fort Hall not far north of what is now Pocatello, Idaho. It has been assumed that he then returned to England.

On page 817 of her book, Mrs. McKelvey says:

"It would be interesting to know what Burke did in later years but the curtain falls at this point on what seems (to me) to have been a sorry story, for the unfortunate Burke certainly."

The author of this note wishes to report that there is in the New York Botanic Garden Herbarium a specimen collected by Joseph Burke in western Missouri in 1853 and sent to Dr. Torrey accompanied by a letter from Burke to Torrey. Torrey named the plant *Hibiscus militaris* and it is today filed under that name in the Garden Herbarium. The letter is on file in the Library. The Garden very kindly had a photograph of the specimen and a photostat of the letter prepared for me, and for the courtesy I thank it and especially the Head Curator, David D. Keck, and the Librarian, Miss Elizabeth C. Hall.

The letter from Mr. Burke to Dr. Torrey follows:

Arrd. Oct. 14th

Harrisonville, Cass Co., Mo.
Sept. 29th, 1853

Dr. Torrey, Professor of Botany esq.

Sir: I take the liberty of writing you concerning a plant I found a few days since.

Although I am a total stranger to you — you are well known to me by reputation — knowing your great love of Botany encouraged me to write freely to you concerning the plant that interests me so much — had I your work I have no doubt I could satisfy myself without giving you trouble for I can scarcely hope it is a new sps. As near as I can remember it is *Hibiscus* — at present I have no work to refer to — About five years ago I lost all my books. They were freighted & insured from New York to Oregon City. I have traced them to San Francisco and no farther. I have no doubt they have been burnt in that place —

As they are insured with the Atlantic Mutual Insurance Co. I have no doubt I shall get my money after a time, and then be able to make up my book losses again —

The *Hibiscus*? I forward you is not a good specimen. It was about the last flower of the season — I was several miles from home seeking horses, when I found it. As I had no proper means of saving it, it is very much damaged — I found it growing in a moist very rich alluvial soil, by the side of a prairie water hole, that is supplied by the rains — It is a perennial sending up many shoots of about 5 feet 6 inches in length —

About the Christmas of the year 41 I found a very pretty *Hibiscus* in the interior of South Africa near the Cashan Mountains which the Dutch immigrants call Macali's berg from a chief named Macali that lives in that region

of country — Near the place I found the Hibiscus & amongst the mountains I found many fine plants — the Hibiscus and a few others are figured in Hooker's continuation of Curtis. I think in the year 43 several are figured in Sir W. J. Hooker's *Icones plantarum*. One is a leguminous tree which Sir W. J. H. has honored me by calling after my name. I have seen none of these figures, as I have scarcely been in England since.

When the gold was first discovered in California. I went there — I spent all the time collecting, that I could not mine — My Herbarium was all lost — I sent a quantity of seeds to Europe according to former promises — I also sent a collection of reptiles and Coleopterous insects to the British Museum — I suppose they were also lost as I have heard nothing of them since — I have sent several collections of Coleoptera to Milby, the great Entomologist of Liverpool — As I have never heard anything of them since — I have great reason to believe they were also lost —

If you have a friend or acquaintance that is interested in Coleoptera I have a small bottle at his service, which I have collected on my own farm, & would feel happy to forward the first opportunity.

I am sir, with much respect, your most obedient servant.

Joseph Burke

Evidently Burke was in California in 1849 or 1850 and later moved to Harrisonville, Cass County, Missouri and lived there on the 29th of September 1853.

This "raises the curtain" for Burke for five years, ten months and twenty-three days.

Piney Branch Farm,
Glen Mill Road, Route 1,
Rockville, Maryland.

A NEW GOSSYPIUM FROM MICHOCAN, MEXICO

HOWARD SCOTT GENTRY

Gossypium lobatum sp. nov. Arbor 6–9 m. alta; truncus ca. 2 m. longus, 15–20 cm. diam. cortice griseo; rami badii, graciles, patuli, paucipunctati; lamina folii 3–5-lobata, cordata, 7–12 cm. longa et subaequilata vel latior, stellato-pubescent, apice, acuminata; pedunculi 7–9 mm. longi, glabri, bracteolis ovatis obtusis, glabris, persistentibus, 4–5 mm. longis, lignosis; calyx 5-lobatus, campanulatus, 20–22 mm. longus, lobis 9–10 mm. longis, triangulo-lanceolatis; corolla punicea, 5–5.5 cm. longa, tubiformis, intra ad basim purpurea; capsula 3-loculata, 25–30 cm. longa; semina oblonga angustissima ca. 1 cm. longa dense et longe pilosa pilis crispatis pallidis.

Slender tree 6–9 m. tall with single stem ca. 2 m. high, 15–20 cm. in diameter, bark light gray on trunk, dark or reddish-brown on branches and young stems with conspicuous scattered lenticels, these transversely elongate or 1–2 mm. broad parallel to horizontal ridges; branches slender, flexuous, spreading, the nodes remote, sparsely dotted with light-colored